

BATHROOM CABINET AND METHOD OF MANUFACTURE

FIELD OF INVENTION

The present invention relates to cabinets and more particularly to a wall mounted cabinet.

5 BACKGROUND OF THE INVENTION

The construction of a cabinet, and more to cabinets adapted for wall mounting, such as bathroom cabinets vary greatly in appearance, cost and features. Typically, all bathroom cabinets include a cabinet body which defines an internal storage area and a door coupled to the cabinet body by a hinge or
10 series of hinges.

When a bathroom cabinet door is closed, typically a mirrored surface is presented to the viewer. The mirrored surface can be coupled to the hinge, framed, or mounted. The appearance, style and shape cabinet door is typically selected to suitably match and complement the decorum and style of the
15 bathroom. When the cabinet door is open, the storage area is revealed along with the details of the cabinet body.

Human nature is such that even a visitor using the bathroom facilities will be curious to open the bathroom cabinet and look at the contents. Not only does the visitor get a look at what the owner stores in their bathroom cabinet, but they
20 are also given a look under the decorative coverings to reveal the quality of the materials and construction. Unfinished corners, open seams, and other

construction details are clearly visible. Given the high costs of decorating and finishing a bathroom, incomplete, sloppy or crude construction details of one component can distort the impression the bathroom renders and taint the observer with a vision of cheap and shoddy workmanship and poor taste.

5 Even in a properly ventilated bathroom will have high levels of humidity at various times, which presents the difficulty in keeping items that are stored in the bathroom dry and mold free. The typical bathroom cabinet has a door which when closed presents a gap for the high levels of humidity to bath the contents of the cabinet.

10 Therefore, there is a need to provide a bathroom cabinet which presents a clean professional designed interior which does not reveal rough construction details. There is a further need to provide a barrier to the high level of humidity in the bathroom from the contents of the bathroom cabinet.

SUMMARY OF THE INVENTION

15 The present invention is a bathroom cabinet for mounting on a wall. The cabinet body has an internal storage area for receiving items to be stored and a cabinet body lip. The cabinet body comprising a top sidewall, a bottom sidewall, a hinge sidewall and a non-hinge sidewall, the top sidewall connected to the hinge sidewall by a first corner structural element, the top sidewall connected to the
20 non-hinge sidewall by a second corner structural element; the bottom sidewall connected to the hinge sidewall by a third corner structural element, the bottom sidewall connected to the non-hinge sidewall by a forth corner structural element.

A cabinet door is pivotally mounted to the cabinet body. A cabinet seal is coupled to the cabinet body lip such that the cabinet seal substantially covers the outer cabinet body lip.

BRIEF DESCRIPTION OF THE DRAWINGS

5 A more complete understanding of the present invention may be obtained from consideration of the following description in conjunction with the drawings in which:

FIG. 1 is a perspective view of the assembled cabinet wall mounted with the door open;

10 FIG. 2 is a perspective detailed view of the corner of the assembled cabinet with the front seal pulled off;

FIG. 3 is a perspective exploded view of the cabinet, and

FIG. 4 is a perspective view of the cabinet body corner structural element.

DETAILED DESCRIPTION OF VARIOUS ILLUSTRATIVE EMBODIMENTS

15 The present invention is a bathroom cabinet which presents a clean professional designed interior and provides a barrier to the high level of humidity in the bathroom from the contents of the bathroom cabinet. Although the present invention bathroom cabinet is particularly well suited for use as a wall mounted
20 cabinet and shall be so described herein, it is equally well suited for use with other types of mounting including partially recessed, framed, surface mounted as well as other mounting configurations that are known to those skilled in the art.

Conventional bathroom typically have a pair of spaced apart vertically extending side walls interconnected with upper and lower spaced apart horizontal walls. The walls of the cabinet body include a flange for receiving the interior surface of a cabinet door when the cabinet door is in the closed position. The flanges of the vertical walls are in an abutting relationship with the flanges of the horizontal walls. The abutting portions of the flanges are generally mitered at a 45 degree angle so that the abutting flanges complement each other in an aesthetically pleasing abutting relationship. However, mitered flanges are problematic in that they are expensive to manufacture, requiring an extensive amount of manufacturing time to ensure that the flanges abut without an unsightly gap.

Similar elements are numbered the same in FIGs. 1, 2, 3 and 4. Referring to FIG. 1 there is shown a perspective view of the assembled cabinet wall mounted with the door open. The assembled bathroom cabinet 100 comprises a cabinet body 102 having an internal storage area 104 and a cabinet door 106 which is pivotally attached to the cabinet body 102 by hinges 108 such that the cabinet door 106 pivots with respect to the cabinet body 102 when the bathroom cabinet 100 is opened and closed. A variety of different hinges 108 may be employed including individual hinges as well as a continuous piano type hinge. Details of the particular hinge selection are dictated by design, style as well as structural elements of the bathroom cabinet 100.

The internal storage area 104 is adjustably divided with shelves 110 which are positioned by shelf pins 112. Both the position and number of the shelves 110 may be varied according to personal preferences. Mounted on the surface of the cabinet body 102 is a continuous cabinet seal 114. The cabinet seal 114 may be
5 attached by an adhesive to the cabinet body 102 as well as it may snap over the outer lip of the cabinet body 102. The cabinet seal 114 is positioned such that it forms a gasket between the cabinet body 102 and the contact area 116 of the cabinet door 106 when the bathroom cabinet 100 is in the closed position.

The cabinet seal 114 can be made of a generally pliable polymeric
10 material, such as polyvinylchloride. However, it is understood by those skilled in the art, that other materials can be used to construct the gasket, such as neoprene, polyethylene or rubber (e.g., buna N) as well as other suitable materials.

The cabinet body 102 has an interior back mirror 118 and the cabinet door 106 has an interior surface mirror 120. The exterior of the cabinet door 106 has
15 an exterior mirror (not shown).

Referring to FIG. 2 there is shown a perspective detailed view of the corner of the bathroom cabinet. The corner of the bathroom cabinet 100 is shown with the cabinet seal 114 pulled off from the cabinet body 102. Corner structural support element 202 is attached to the walls of the cabinet body 102 with screws
20 208. Corner cap 204 is attached to the corner structural support element 202 with screws 206. Screw covers 210 snap in place over screws 208 to hide their appearance. The corner structural support element 202 is made of aluminum

although it is equally well suited to be made out of other suitable materials. It can be seen how the corner structural support element 202 is flush with the interior walls of the cabinet body 102 and that the outer lip of the cabinet body 102 is flush with the corner cap 204.

5 Referring to FIG. 3 there is shown a perspective exploded view of the cabinet. Optional interior back mirror 118 is attached to back support 312 by strips of acrylic tape 310 approximately $\frac{1}{2}$ inch in width and substantially the length of the interior back mirror 118. Hinge sidewall 302, non-hinge sidewall 304, bottom sidewall 306 and top sidewall 308 have a channel suitable to hold
10 back support 312. The acrylic tape 310 positions the interior back mirror 118 on the back support 312 such that the interior back mirror is aligned near the assembled bathroom cabinet 102 hinge sidewall 302, non-hinge sidewall 304, bottom sidewall 306 and top sidewall 308.

Hinge sidewall 302, non-hinge sidewall 304, bottom sidewall 306 and top
15 sidewall 308 are each connected with corresponding corner structural support element 202 using screws 206 (not shown). The corner caps 204 are attached to the corresponding corner structural support element 202 with screws 206 (not shown). Cabinet seal 114 is attached such that the cabinet seal 114 covers outer lips 310, 312, 314, 316 and corner caps 204.

20 FIG. 4 is a perspective view of the cabinet body corner structural element. The corner structural element 202 is shaped such that when the bathroom cabinet 100 is assembled, exposed surfaces 402 can be seen in the internal storage area

104 of the cabinet body 102 while hidden surfaces 404 are covered by corresponding sidewalls (hinge sidewall 302, non-hinge sidewall 304, bottom sidewall 306 and top sidewall 308). The exposed surfaces 402 are painted the same color as the interior surfaces of the hinge sidewall 302, non-hinge sidewall 304, bottom sidewall 306 and top sidewall 308. While the corner structural element 202 and the corner cap 204 are shown as separate components attached together with screws 206, they can also be attached together by welding, adhesive, rivets and other suitable fastener devices and means known to those skilled in the art. Furthermore, corner structural element 202 and the corner cap 204 can be constructed as a single integral element.

Numerous modifications and alternative embodiments of the invention will be apparent to those skilled in the art in view of the foregoing description. Accordingly, this description is to be construed as illustrative only and is for the purpose of teaching those skilled in the art the best mode of carrying out the invention. Details of the structure may be varied substantially without departing from the spirit of the invention and the exclusive use of all modifications, which come within the scope of the appended claims, is reserved.